



**Global motor skill assessment from the UQAC-UQAM test battery:
Canadian normative values by age and gender.**

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Values for boys aged 6.00 to 6.99 years (N=124)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	6.00	6.99	6.66	0.24	6.69
Weight (kg)	13.0	59.0	24.1	6.1	23.0
Height (cm)	108.6	138.0	121.5	5.6	121.4
BMI (kg·m ⁻²)	8.9	34.9	16.1	2.9	15.6
Upper limb speed (nb/20s)	32	72	51.0	8.0	52.0
Lower limb speed (nb/20s)	8	27	15.8	3.7	16.0
5m shuttle run (s)	9.9	24.6	13.1	1.9	12.6
Circle run (s)	11.9	40.7	24.7	3.7	24.3
Side step run (s)	10.1	26.6	13.8	2.2	13.4
Slalom run (s)	8.5	45.0	24.3	5.0	24.4
Balance eyes open (s)	1.8	43.1	12.4	9.6	9.9
Balance eyes closed (s)	0.9	46.1	8.3	6.5	7.3
Board balance (s)	0.7	60.0	8.0	12.4	2.8
Simple reaction time (ms)	196	323	290	24	297
Precision (pts)	0	7	2.3	1.8	2.0
Eye-hand coordination (s)	9.0	60.0	25.9	11.2	24.9
Dribbling (nb/20s)	5	52	29.3	11.2	31.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	45.0	56.1	48.4	2.6	47.8

Values for boys aged 7.00 to 7.99 years (N=189)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	7.00	7.99	7.50	0.28	7.48
Weight (kg)	17.0	60.0	25.9	6.0	25.0
Height (cm)	111.5	146.0	126.0	6.1	125.5
BMI (kg·m ⁻²)	12.3	33.7	16.2	3.0	15.5
Upper limb speed (nb/20s)	30	80	56.6	9.5	56.0
Lower limb speed (nb/20s)	10	29	18.7	3.8	19.0
5m shuttle run (s)	9.4	16.0	12.3	1.4	12.2
Circle run (s)	11.7	32.4	23.8	3.1	23.5
Side step run (s)	8.8	21.3	12.7	2.2	12.3
Slalom run (s)	16.0	34.6	22.0	3.9	21.4
Balance eyes open (s)	0.5	60.0	14.8	13.9	10.8
Balance eyes closed (s)	1.6	60.0	11.8	9.5	9.3
Board balance (s)	0.5	60.0	6.2	8.9	3.3
Simple reaction time (ms)	214	325	294	18	296
Precision (pts)	0	9	2.9	2.1	2.0
Eye-hand coordination (s)	4.0	60.0	19.1	8.9	17.0
Dribbling (nb/20s)	6	50	32.5	8.7	33.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	43.2	59.5	48.0	3.1	47.7

Values for boys aged 8.00 to 8.99 years (N=278)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	8.00	8.99	8.53	0.29	8.55
Weight (kg)	16.0	73.0	29.0	6.9	28.0
Height (cm)	113.5	152.0	131.7	6.4	131.5
BMI (kg·m ⁻²)	7.6	31.6	16.6	2.9	16.0
Upper limb speed (nb/20s)	30	90	62.5	9.7	62.0
Lower limb speed (nb/20s)	9	32	20.5	4.1	21.0
5m shuttle run (s)	8.5	23.3	11.6	1.5	11.3
Circle run (s)	16.3	33.4	22.9	2.8	22.3
Side step run (s)	8.0	53.0	11.8	3.1	11.4
Slalom run (s)	8.5	34.5	20.5	3.4	20.1
Balance eyes open (s)	0.8	60.0	20.0	16.3	15.0
Balance eyes closed (s)	1.1	60.0	16.9	14.9	11.6
Board balance (s)	0.5	60.0	8.2	12.6	3.5
Simple reaction time (ms)	244	326	288	17	288
Precision (pts)	0	12	3.8	2.4	3.0
Eye-hand coordination (s)	3.3	48.8	15.9	6.7	14.3
Dribbling (nb/20s)	12	60	36.5	7.7	36
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	41.2	58.6	47.3	4.0	46.8

Values for boys aged 9.00 to 9.99 years (N=263)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	9.00	9.99	9.49	0.29	9.48
Weight (kg)	20.0	90.0	31.8	8.5	30.0
Height (cm)	117.0	158.2	131.7	6.4	131.5
BMI (kg·m ⁻²)	12.0	38.2	17.0	3.4	16.2
Upper limb speed (nb/20s)	36	92	66.0	8.7	66.0
Lower limb speed (nb/20s)	8	32	22.5	3.8	23.0
5m shuttle run (s)	5.2	17.8	11.3	1.4	11.0
Circle run (s)	11.7	36.2	22.1	3.0	21.6
Side step run (s)	8.4	20.3	11.3	1.7	11.0
Slalom run (s)	10.8	37.9	19.6	3.5	18.9
Balance eyes open (s)	0.9	60.0	23.1	18.2	16.8
Balance eyes closed (s)	1.2	60.0	18.3	15.1	13.7
Board balance (s)	0.9	60.0	11.9	15.3	5.3
Simple reaction time (ms)	226	319	281	17	282
Precision (pts)	0	14	4.8	2.8	4.0
Eye-hand coordination (s)	4.8	60.0	13.9	6.7	12.2
Dribbling (nb/20s)	6	65	39.6	7.8	40
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	39.2	59.5	46.8	4.5	46.6

Values for boys aged 10.00 to 10.99 years (N=258)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	10.00	10.99	10.49	0.29	10.5
Weight (kg)	20.0	64.0	35.8	8.4	34.0
Height (cm)	121.0	159.5	142.0	6.6	142.3
BMI (kg·m ⁻²)	11.6	30.2	17.6	3.4	16.7
Upper limb speed (nb/20s)	37	104	71.2	9.6	70.0
Lower limb speed (nb/20s)	12	36	23.6	4.2	24.0
5m shuttle run (s)	7.8	21.8	11.1	1.3	10.9
Circle run (s)	14.7	30.8	21.7	2.6	21.2
Side step run (s)	6.8	16.4	10.9	1.4	10.9
Slalom run (s)	11.1	29.9	19.0	2.9	18.6
Balance eyes open (s)	1.0	60.0	28.6	19.8	22.0
Balance eyes closed (s)	1.2	60.0	21.6	17.1	16.1
Board balance (s)	0.5	60.0	16.7	18.5	8.8
Simple reaction time (ms)	226	327	276	19	277
Precision (pts)	0	14	5.6	2.7	5.0
Eye-hand coordination (s)	4.8	43.0	11.9	4.8	10.9
Dribbling (nb/20s)	22	75	40.9	6.9	41.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	37.6	58.2	45.8	4.7	45.8

Values for boys aged 11.00 to 11.99 years (N=233)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	11.00	11.99	11.48	0.29	11.47
Weight (kg)	22.0	99.0	41.3	11.6	39.3
Height (cm)	131.0	170.0	148.1	7.6	148.0
BMI (kg·m ⁻²)	11.8	38.1	18.6	4.0	17.7
Upper limb speed (nb/20s)	50	100	75.5	9.1	76.0
Lower limb speed (nb/20s)	14	39	25.0	3.9	25.0
5m shuttle run (s)	8.0	15.0	10.7	1.2	10.6
Circle run (s)	16.9	33.2	21.1	2.4	20.8
Side step run (s)	7.0	21.9	10.6	1.7	10.3
Slalom run (s)	10.9	36.2	18.0	2.6	17.7
Balance eyes open (s)	1.3	60.0	28.8	20.1	23.9
Balance eyes closed (s)	1.0	60.0	23.1	18.6	17.1
Board balance (s)	0.9	60.0	18.3	20.7	8.6
Simple reaction time (ms)	217	315	268	19	267
Precision (pts)	0	13	6.3	2.8	6.0
Eye-hand coordination (s)	5.4	24.1	10.6	3.4	9.9
Dribbling (nb/20s)	22	66	42.5	6.8	42
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	35.7	59.5	44.2	4.7	43.6

Values for boys aged 12.00 to 12.99 years (N=142)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	12.00	12.99	12.39	0.32	12.31
Weight (kg)	23.0	84.1	45.3	11.7	44.3
Height (cm)	120.6	170.3	152.2	8.4	151.5
BMI (kg·m ⁻²)	12.2	36.7	19.4	4.2	18.6
Upper limb speed (nb/20s)	31	116	76.9	10.8	76
Lower limb speed (nb/20s)	13	35	25.5	4.3	26
5m shuttle run (s)	9.0	15.0	10.6	1.2	10.3
Circle run (s)	16.4	28.0	20.9	2.4	20.3
Side step run (s)	7.4	14.3	10.1	1.3	10.1
Slalom run (s)	13.3	29.2	17.3	2.7	16.8
Balance eyes open (s)	1.2	60.0	28.2	20.3	23.1
Balance eyes closed (s)	2.2	60.0	30.1	20.9	23.1
Board balance (s)	1.0	60.0	20.3	19.8	10.8
Simple reaction time (ms)	197	309	267	20	268
Precision (pts)	0	16	6.7	3.0	7.0
Eye-hand coordination (s)	4.6	35.0	10.5	4.1	9.3
Dribbling (nb/20s)	21	64	45.0	7.8	46
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	33.4	57.6	44.4	5.22	44.8

Values for girls aged 6.00 to 6.99 years (N=142)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	6.00	6.99	6.63	0.24	6.64
Weight (kg)	13.0	39.0	22.5	4.3	22.0
Height (cm)	109.0	137.1	120.2	5.3	120.5
BMI (kg·m ⁻²)	10.6	27.9	15.5	2.5	15.0
Upper limb speed (nb/20s)	20	83	54.0	10.0	50.5
Lower limb speed (nb/20s)	10	24	16.0	3.2	16.0
5m shuttle run (s)	10.4	18.0	13.0	1.4	12.9
Circle run (s)	12.8	34.2	24.5	2.9	24.3
Side step run (s)	9.9	24.6	14.1	2.4	13.6
Slalom run (s)	9.1	39.9	23.6	4.0	23.1
Balance eyes open (s)	1.2	60.0	15.7	14.7	11.1
Balance eyes closed (s)	1.4	60.0	10.2	9.8	7.0
Board balance (s)	0.9	60.0	7.7	13.5	2.6
Simple reaction time (ms)	206	327	294	27	299
Precision (pts)	0	6	1.2	1.3	1.0
Eye-hand coordination (s)	8.4	60.0	22.0	9.0	19.6
Dribbling (nb/20s)	5	45	25.7	9.5	26.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	45.1	56.4	47.6	2.5	47.4

Values for girls aged 7.00 to 7.99 years (N=222)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	7.00	7.99	7.51	0.28	7.50
Weight (kg)	15.1	54.9	24.9	5.2	24.0
Height (cm)	110.2	146.0	125.0	5.6	125.0
BMI (kg·m ⁻²)	9.9	29.5	15.8	2.4	15.3
Upper limb speed (nb/20s)	30	76	56.0	9.1	58.0
Lower limb speed (nb/20s)	8	26	17.9	3.7	18.0
5m shuttle run (s)	9.4	20.1	12.5	1.3	12.4
Circle run (s)	15.1	32.8	24.3	2.8	23.8
Side step run (s)	9.3	22.2	13.1	2.0	13.0
Slalom run (s)	15.7	36.0	22.5	3.5	22.0
Balance eyes open (s)	0.7	60.0	19.1	15.7	15.5
Balance eyes closed (s)	1.0	60.0	16.1	14.9	11.9
Board balance (s)	0.5	60.0	9.2	14.5	4.5
Simple reaction time (ms)	218	331	297	19	299
Precision (pts)	0	8	1.7	1.5	1.0
Eye-hand coordination (s)	4.1	60.0	17.1	7.0	15.9
Dribbling (nb/20s)	6	60	29.5	8.7	30.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	43.2	54.9	47.0	2.5	46.5

Values for girls aged 8.00 to 8.99 years (N=259)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	8.00	8.99	8.51	0.27	8.50
Weight (kg)	18.0	66.1	29.1	7.9	26.6
Height (cm)	113.1	147.5	130.8	6.4	130.5
BMI (kg·m ⁻²)	12.2	35.7	16.9	3.8	15.7
Upper limb speed (nb/20s)	31	82	61.3	8.7	62.0
Lower limb speed (nb/20s)	10	40	20.9	3.7	21.0
5m shuttle run (s)	8.9	30.4	11.9	1.8	11.7
Circle run (s)	15.8	31.5	23.2	2.5	22.8
Side step run (s)	6.7	20.9	12.3	1.9	12.1
Slalom run (s)	15.5	33.0	21.1	3.0	20.7
Balance eyes open (s)	0.9	60.0	25.0	19.3	19.6
Balance eyes closed (s)	0.9	60.0	18.8	15.7	14.0
Board balance (s)	0.3	60.0	15.0	18.9	6.0
Simple reaction time (ms)	204	327	293	19	296
Precision (pts)	0	10	2.5	2.0	2.0
Eye-hand coordination (s)	4.9	60.0	13.6	6.6	12.3
Dribbling (nb/20s)	6	49	34.5	7.3	35.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	41.4	55.6	46.0	3.1	45.1

Values for girls aged 9.00 to 9.99 years (N=277)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	9.00	9.99	9.49	0.29	9.5
Weight (kg)	18.0	68.5	32.0	8.1	30.00
Height (cm)	120.9	162.3	136.4	6.8	136.0
BMI (kg·m ⁻²)	11.1	29.8	17.1	3.2	16.3
Upper limb speed (nb/20s)	39	94	67.0	9.1	66.0
Lower limb speed (nb/20s)	12	33	22.7	3.4	23.0
5m shuttle run (s)	8.9	15.5	11.4	1.1	11.3
Circle run (s)	9.6	32.8	22.5	2.6	22.5
Side step run (s)	8.5	22.0	11.7	1.8	11.4
Slalom run (s)	12.2	28.7	19.9	2.6	19.7
Balance eyes open (s)	1.2	60.0	26.9	19.6	21.7
Balance eyes closed (s)	1.0	60.0	20.3	15.7	15.9
Board balance (s)	0.5	60.0	13.2	17.3	5.9
Simple reaction time (ms)	244	325	289	17	288
Precision (pts)	0	11	2.9	2.0	2.0
Eye-hand coordination (s)	5.0	35.5	12.1	5.3	10.8
Dribbling (nb/20s)	15	57	37.1	5.3	38
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	39.5	57.1	44.5	2.8	44.2

Values for girls aged 10.00 to 10.99 years (N=267)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	10.00	10.99	10.48	0.30	10.50
Weight (kg)	21.2	67.0	37.8	9.5	36.00
Height (cm)	105.0	168.5	143.9	8.1	142.9
BMI (kg·m ⁻²)	12.4	32.7	18.1	3.7	17.1
Upper limb speed (nb/20s)	38	104	71.9	10.8	72
Lower limb speed (nb/20s)	11	33	23.7	3.4	24.0
5m shuttle run (s)	8.9	15.1	11.2	1.1	11.1
Circle run (s)	10.2	31.0	22.2	2.6	21.8
Side step run (s)	7.0	34.4	11.2	2.0	11.0
Slalom run (s)	8.7	30.0	19.0	2.6	18.9
Balance eyes open (s)	1.0	60.0	33.1	20.8	28.5
Balance eyes closed (s)	1.3	60.0	24.7	18.7	19.6
Board balance (s)	0.5	60.0	20.4	22.0	9.2
Simple reaction time (ms)	222	322	282	20	284
Precision (pts)	0	14	4.2	2.4	4.0
Eye-hand coordination (s)	4.9	29.0	9.8	3.3	9.2
Dribbling (nb/20s)	18	65	38.9	6.4	39.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	37.3	58.1	43.8	3.8	43.2

Values for girls aged 11.00 to 11.99 years (N=260)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	11.00	11.99	11.50	0.28	11.52
Weight (kg)	21.0	84.2	42.9	10.1	41.6
Height (cm)	127.8	173.5	150.9	8.0	151.0
BMI (kg·m ⁻²)	11.2	34.2	18.7	3.6	18.3
Upper limb speed (nb/20s)	45	107	77.3	10.5	76.0
Lower limb speed (nb/20s)	14	39	25.5	3.7	26.0
5m shuttle run (s)	9.0	21.1	10.9	1.2	10.8
Circle run (s)	14.5	27.6	21.6	2.1	21.3
Side step run (s)	4.1	15.3	10.6	1.4	10.5
Slalom run (s)	11.5	27.5	18.4	2.1	18.1
Balance eyes open (s)	1.0	60.0	30.9	21.8	25.8
Balance eyes closed (s)	1.5	60.0	25.4	19.6	19.0
Board balance (s)	0.6	60.0	22.5	22.5	10.5
Simple reaction time (ms)	230	316	278	17	278
Precision (pts)	0	12	4.4	2.3	4.0
Eye-hand coordination (s)	4.0	25.9	9.1	3.0	8.4
Dribbling (nb/20s)	9	62	39.8	6.0	40.0
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	35.6	56.5	42.7	3.6	42.0

Values for girls aged 12.00 to 12.99 years (N=128)

Variables	Minimum	Maximum	Mean	SD	Median
Age (yrs)	12.00	12.99	12.35	0.32	12.30
Weight (kg)	28.0	101.4	48.2	12.8	44.8
Height (cm)	131.5	173.0	154.3	7.4	155.1
BMI (kg·m ⁻²)	12.7	36.3	20.1	4.4	18.8
Upper limb speed (nb/20s)	48	102	77.4	11.0	76.0
Lower limb speed (nb/20s)	12	44	26.3	4.2	26.0
5m shuttle run (s)	9.3	14.4	10.9	1.0	10.6
Circle run (s)	15.9	28.9	21.6	2.3	21.4
Side step run (s)	8.3	17.4	10.6	1.4	10.50
Slalom run (s)	13.0	24.3	18.0	2.2	17.8
Balance eyes open (s)	1.3	60.0	32.6	21.6	31.5
Balance eyes closed (s)	2.9	60.0	29.2	19.7	25.2
Board balance (s)	1.4	60.0	21.2	21.0	11.6
Simple reaction time (ms)	234	323	274	18	273
Precision (pts)	1	13	5.1	2.4	5.0
Eye-hand coordination (s)	4.4	49.0	9.0	4.4	8.3
Dribbling (nb/20s)	19	59	40.8	6.3	40.5
20m Shuttle run (ml·kg ⁻¹ ·min ⁻¹)	34.2	55.6	41.9	6.3	41.9

